WHAT IS CLAIMED IS:

1. A vasoocclusive device that is adapted to be inserted into a portion of a vasculature for occluding a portion of the vasculature for use in interventional therapy and vascular surgery, comprising:

at least one strand of a flexible material formed to have a portion with a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable, three dimensional orthogonal configuration for occluding the desired part of the vasculature to be treated.

2. The vasoocclusive device of Claim 1, further comprising a second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable, coiled shape for filling and reinforcing the distal, three dimensional shaped portion when the vasoocclusive device is implanted at the site in the vasculature to be treated.

3. The vasoocclusive device of Claim 1, further comprising a second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable, substantially J-shape for filling and reinforcing the distal, three dimensional shaped portion when the vasoocclusive device is implanted at the site in the vasculature to be treated.

4. The vasoocclusive device of Claim 1, further comprising a second portion having a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a second operable, substantially helical coil shape for filling and reinforcing the distal, three dimensional shaped portion when the vasoocclusive device is implanted at the site in the vasculature to be treated.

5. The vasoocclusive device of Claim 1, wherein said vasoocclusive device is formed from at least one flexible strand of a resilient radiopaque material to provide a radiopaque marker of the deployed configuration of a device made of the strand during vascular surgery.

6. The vasoocclusive device of Claim 1, wherein said at least one strand comprises a super-elastic material.

7. The vasoocclusive device of Claim 9, wherein said super-elastic material comprises a nickel titanium alloy.

8. The vasoocclusive device of Claim 1, wherein said at least one strand comprises a shape memory material.

9. The vasoocclusive device of Claim 12, wherein said shape memory material comprises a nickel-titanium alloy.

10. The vasoocclusive device of Claim 9, wherein said shape memory nickel-titanium alloy is heat treated such that the alloy is highly flexible at a temperature appropriate for introduction into the body via a catheter, and after placement, the device will take on the primary coil configuration.

11. The vasoocclusive device of Claim 5, wherein said radiopaque strand comprises at least one centrally, axially disposed radiopaque wire.

12. The vasoocclusive device of Claim 5, wherein said radiopaque strand is made of platinum.

13. The vasoocclusive device of Claim 5, wherein said radiopaque strand is made of tungsten.

14. The vasoocclusive device of Claim 5, wherein said radiopaque strand is made of gold.

15. The vasoocclusive device of Claim 1, wherein said strand of flexible material is further formed into a helical shape which is the form of the first, inoperable, substantially linear configuration of the strand.

16. A method of making a vasoocclusive device that is adapted to be inserted into a portion of a vasculature for occluding the portion of the vasculature for use in interventional therapy and vascular surgery, said vasoocclusive device being formed from at least one strand of a flexible material formed to have a first inoperable, substantially linear configuration for insertion into and through a catheter to a desired portion of the vasculature to be treated, and a portion having a second operable, three dimensional configuration for occluding the desired portion of the vasculature to be treated, the method comprising the steps of:

winding at least one strand of a flexible material about a an orthogonally shaped mandrel in a three dimensional orthogonal configuration of the vasoocclusive coil;

heating said at least one strand of a flexible material wound about the mandrel for a sufficient period of time to impart the form to the material included in the device to form an operable, three dimensional configuration of the vasoocclusive coil;

removing the vasoocclusive coil from the mandrel; and

cold working the vasoocclusive coil into a desired elongated configuration for placement into a catheter or cannula for use.

17. The method of Claim 16, wherein the mandrel about which said at least one flexible strand forming the vasoocclusive coil is wound has a substantially orthogonally shaped body with a plurality of posts disposed on the body, said posts being at least as large in diameter as the radius of said body.

18. The method of Claim 17, wherein six posts are disposed on the body aligned with the three orthogonal x, y and z axes through the body of the mandrel, for aligning and shaping the distal portion of the vasoocclusive device as it is wound on the mandrel.

19. The method of Claim 17, wherein said body includes a handle, and further comprising the step of helically winding a portion of the vasoocclusive coil about the handle.

20. The method of Claim 17, wherein said main body is substantially orthogonal.

21. The method of Claim 17, wherein said main body is substantially cubical.